



Ending world hunger
in times of Covid-19.
Utopian challenge or goal to achieve?

By the Program Department

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Introduction

Armadilla is a social cooperative committed, primarily, in the context of international cooperation. (www.armadilla.coop)

It also conducts training and information on the issues of the 2030 Agenda, proposed by the United Nations, for the defence of human rights and for the achievement of the 17 Goals for sustainable human development: <https://www.unric.org/it/agenda-2030>

In this context, these notebooks want to help to disseminate among students and the public opinion to which Armadilla is addressed, information, critical analysis, possible answers to the priority problems that are addressed. The collection of all the Notebooks from 2015 to the present is located in: <http://armadilla.coop/quaderni/>

In this Notebook we propose an update, considering the effects of the COVID-19 pandemic, to achieve the 2030 Agenda Goal No.2: "To end world hunger, achieve food security, improve nutrition and promote sustainable agriculture..."

We will refer to two Documents of the United Nations agencies (FAO, IFAD, WFP, UNICEF and WHO), the first entitled "2020 - *The state of food security and nutrition in the world. Transforming food system for affordable healthy diets*", the full text of which can be found on the following site: <http://www.fao.org/3/ca9692en/online/ca9692en.html> and the second entitled "*FAO-WFP Early warning analysis of acute food insecurity hotspots July 2020*" whose full text can be found on the website <http://www.fao.org/3/cb0258en/CB0258EN.pdf>.

Five years after the international community committed itself to approving the 2030 Agenda to eradicate hunger, food insecurity and all forms of malnutrition from the world, we are still a long way from achieving this goal by 2030.

The data updated by the UN agencies tell us that the world is not progressing to ensure access to safe and nutritious products and enough food for all people throughout the year, nor towards the goal of eradicating all forms of malnutrition.

Estimates of data collected in 2019 tell us that almost 690 million people are hungry, or 8.9 percent of the world's population. The number of people suffering from severe food insecurity, which is another measure approaching hunger, shows a similar upward trend. In 2019, almost 750 million, almost one in ten people worldwide, are exposed to severe levels of food insecurity.

Currently, seven countries around the world are about to be hit by an acute food crisis, driven by the knock-on effects of the Covid-19 against already vulnerable populations and territories. Almost no region is immune, from Afghanistan and Bangladesh in Asia, Haiti and Venezuela in America, Iraq, Sudan and Lebanon and Syria in the Middle East to Burkina Faso, Cameroon, Liberia, Mozambique, and Zimbabwe in Africa.

Due to the combined impact of several factors (economic crisis, insecurity and political instability, extreme climatic conditions, and animal diseases), the Planet is likely to face the worst food crisis ever in the coming months.

The FAO report indicates that at the end of 2019, 135 million people in 55 countries and territories were exposed to acute food insecurity. In addition, in the 55 countries in food crisis examined in the report, 75 million children were affected by rickets in 2019 and 17 million were decayed. It is the highest level of acute food insecurity and acute malnutrition documented by the Network since the first edition of the 2017 report. More than half (73 million) of the 135 million people covered by the report live in Africa; 43 million in the Middle East and Asia; 18.5 million in Latin America and the Caribbean.

The main factors behind these trends were: conflict (key factors that led 77 million people to acute food insecurity), extreme weather events (34 million people) and economic turbulence (24 million).

The analysis starts with listing the four main factors with which Covid-19 is pushing millions of people towards acute hunger or malnutrition. Firstly, the impoverishment due to unemployment and wage reduction and, at the same time, the increase in food prices. Secondly, the growing impact of blockades and restrictions on the production and supply of food. The third factor is the weakening of social protection networks and school feeding programmes, which have been underfunded compared to the past by states struggling with economic problems. Finally, the pandemic can contribute to political instability and fuel conflict, for example between communities on natural resources such as water, or on migration routes. In post Covid-19 reconstruction investments, countries need to consider the importance of a rebalancing of agriculture through policies and incentives that promote greater sensitivity to proper nutrition and invest in strategic policies to universally ensure access to food, social protection, increased purchasing power and healthy diets of the most vulnerable populations.

1. Covid-19 and food safety around the world

The pandemic that shocked the world in the early 2020s caused a loss of purchasing power due to falling incomes, lost remittances and, in some contexts, the sharp rise in food prices, affecting the poor in cities and populations who depend on the market for access to food.

The negative impact on employment appears to be greater than initially expected...

The International Labour Organization estimates that 400 million full-time jobs will be lost globally and 14 per cent reduction in overall working hours.

Countries with a higher proportion of people employed in the informal sector will be most affected by an increase in extreme poverty and resulting food insecurity.

Food prices have risen in many countries since the start of the pandemic and could rise further and further. Falling export revenues from poor countries due to falling commodity **prices (oil, minerals, metals)** and **a dramatic fall in tourism have put a strain on currencies and increased food prices, particularly imported foods.** The closure of borders, the difficulties of internal mobility and the suspension and suspension of weekly outdoor markets, in many countries, have led to a reduction in regional trade and prevented farmers from selling their products, ingraining the economic situation of producers and consumers.

Goal 2: End hunger, achieve food security, improve nutrition and promote sustainable agriculture

Subject	Target	
Nutrition	2.1: End hunger and ensure food security for all	2030
	2.2: put an end to all forms of malnutrition	
Food Production	2.3: Raddoppiare produttività e reddito dei produttori su piccola scala	2030
	2.4: Garantire sistemi di produzione alimentare sostenibili e implementare pratiche agricole resilienti	
	2.5: Mantenere la diversità genetica delle specie vegetali e animali impiegate per la produzione di cibo	2030
Implementation tools	2.a: Increase investment in agriculture in developing countries	
	2.b: Correct and prevent restrictions and distortions in agricultural markets	
	2.c: Limit the extreme instability of food prices	

Indicators released by Istat for the monitoring of United Nations Sustainable Development Goal 2 (Zero Hunger)

Rome, 29/11/2018



FAO and World Food Program (WFP) have identified four main ways in which COVID-19 is pushing people into deeper hunger:

- **Losing your job and wages** means having less money to spend on feeding families or, for those working abroad, to be sent as remittances to relatives in countries exposed to food insecurity. At the same time, food prices are rising in many critical countries, which hampers access to food.
- The series of outages associated with the necessary **health countermeasures due to the pandemic** are also having significant and increasing consequences on food supply chains.
- The **collapse in state revenue means that essential safety nets, such as social protection and school feeding programmes, are underfunded and unable to meet growing needs.**
- The pandemic could also **contribute to political instability and exacerbate conflicts between communities over natural resources such as water, pastures, and migration routes**, further disrupting agricultural production and markets.

The data from FAO's investigations into countries in food crisis confirms today's joint analysis, indicating that **food production is proving to be a serious challenge.**

The farmers interviewed report numerous difficulties in accessing seeds, resulting in reductions in sowing. This dynamic is likely to lead to a vicious circle: falling production, lower employment opportunities in agriculture and rising food prices, which will lead to the adoption of negative strategies to deal with the situation and the further deterioration of food and nutrition security.

In an effort to counter emerging trends, FAO has published the revised appeal for USD 428.5 million as part of the United Nations System's Global COVID-19 Humanitarian Response Plan, which addresses the growing needs of the agri-food sector, focusing on urgent assistance to protect livelihoods and maintain food supply chains to ensure that the most vulnerable people can access and produce essential food and nutrients. , as well as data collection and analysis to intervene in a targeted way.

FAO says meeting the challenges requires urgent and large-scale action.

The main agricultural seasons, livestock movements for grazing and water, harvesting, processing and storage of food are not activities that can be paused.

The level of malnutrition in Africa indicates that 19.1% of the population, or more than 250 million people are undernourished. In 2014, that figure was 17.6 percent.. This percentage is more than twice the world average (8.9 per cent) and is the highest of all regions on the planet...

For vulnerable families, purchasing power has fallen dramatically due to the combined effects of low incomes and, in some cases, higher prices than food. **In addition to COVID-19, East African**

countries in the Horn of Africa facing the worst desert locust outbreak in 25 years, threatening local food production and security of all livelihoods. The region has also seen severe flooding in May 2020, which has affected nearly 1.3 million people. Particular attention deserves the situation about 3.3 million of refugees and 6.2 million internally displaced persons in the eastern part of the continent (data WFP 2020), that depend almost totally on external assistance to meet their nutritional needs. Although the largest number of people living in the conditions of food insecurity live in rural areas, also the situation in urban areas is a cause for growing concern. All governments in the East African region have imposed restrictions on movement because of the COVID-19 and this has made it more difficult to access buying agricultural inputs and to receive technical advice and support services for farmers.

Wholesale activity has been reduced, with minimum levels of sales on the domestic market, with increasing difficulties in exporting agricultural products and an increase in food prices. The closure of livestock markets in some countries and the reduction in export demand for live animals in the Middle East have had negative implications for the incomes of shepherds' families and national economies. Similarly, restrictions on movements, the closure of borders, have restricted the access of immigration of agricultural workers and access to traditional grazing points and water for transhumant shepherds.

In **Somalia**, new floods, periods of drought, an invasion of locusts, the risk of further escalation of conflicts and COVID-19 exacerbate the already difficult historical humanitarian situation. This situation worsens the situation of food safety in the country, tripling the number of people in need of food aid.

3.5 million people are expected to face acute food insecurity between July and September 2020. The government has forecast an 11% fall in GDP in 2020. Somalia is heavily dependent on food imports and prices for basic food continue to rise across the country due to limited availability and high demand. Rising prices on the main imported raw materials have an impact on low-income workers, particularly internally displaced people, and rural communities.

Then South Sudan, the permanent situation of conflict, the endemic economic crisis, an invasion of desert locusts, natural hazards, and COVID-19, have also aggravated the conditions of food insecurity, which have already historically been alarming. Landless people in food insecurity are estimated, in May - in July 2020, in almost 6.5 million. However, due to the impact of COVID-19, the actual number of people suffering from hunger is probably much higher.

South Sudan is highly exposed to reduced demand and the cost of oil supplies. The negative impacts of COVID-19 on agricultural production (limited access to seeds, animal health and vaccination facilities and labour), and on the marketing of plants and livestock, fishing, small trade, and job opportunities. This, together with an increase in food prices, has put the country's economy in crisis, exacerbated by transport difficulties due to cross-border COVID-19 checkpoints. New flooding is also expected during the rainy season.

In **Ethiopia**, the spread of Covid-19 disease risks affecting an already very weak health system, within a particularly fragile social, political, and economic fabric. The gradual restrictive measures put in place by the government largely reflect a special attention to all these delicate social and economic dynamics: a very mild lockdown implemented immediately after the first confirmed case of Covid-19, with the aim of mitigating the possible devastating effects of the spread of the virus on the country's economy. The Ethiopian Government has made public an alarming fact: 30 million people are at risk of death from malnutrition, about a third of the country's population. With these figures, 2020 is worse than in 1984, which had led to 10 million deaths in two months from hunger. Situation aggravated by Covid-19 but already affected by climate change which has led to a scarcity and irregularity of the rains, compromised the crops and procured the death of livestock. In addition this year also swarms of locusts have ruined all agriculture, the main source of income and food for the population... Cases of Covid-19 are registering among refugees, raising fears of a rapid spread of contagion in a group already considered high risk, just think that in the Refugee camp of Adi-Harush, which has almost 34,000 residents who have fled Eritrea, and where positives have already been found, the social distance is unthinkable.

In **Nigeria**, more than 3.8 million people mainly employed in the informal sector are at high risk of losing their jobs due to the spread of the pandemic. That figure could rise to 13 million if traffic restrictions continue for a longer period. In a country where about 90 million people (46 percent of the population) live on less than 2 dollars a day. In the states of Borno, Yobe and Adamawa in northeastern Nigeria, the conflict is affecting the lives and livelihoods of millions of people. Nearly 3 million people are starving and 440,000 children are severely malnourished. Violence and insecurity are causing mass exodus: 1.75 million people live in camps or communities that have welcomed them in Nigeria and tens of thousands are seeking refuge in neighbouring countries such as Cameroon, Chad and Niger.

Many of those who had left the country are now returning and need food and a roof. The increase in cases of Covid-19 in a region already 'shaken by violence for a decade' is worrying according to humanitarian agencies.

Communities already exhausted by conflict are facing 'extreme hunger' and are particularly 'vulnerable to the socio-economic effects of the pandemic'. That is why the urgency of the Nigerian authorities and humanitarian partners is to maintain life-saving programs.

In **Sierra Leone**, the COVID-19 pandemic is already severely worsening the economic situation severely affected by months of continuous currency depreciation and rampant inflation, with a decline in external and domestic demand reducing economic activity, and containment measures that disrupt supply chains. 4 million people face worrying conditions in food safety...

Liberia is also very worrying. 83.8% of the population lives below the poverty line and 94% of workers have an income of less than 2 dollars per day. The Covid 19 containment measures have hit small farmers most hard to access markets because of restrictions and a severe shortage of

fertilizers caused by restrictions has hampered domestic agricultural production. Chronic malnutrition at 32% is among the highest in the world.

Even in **Cameroon**, where the situation is aggravated by the continuing encroachment of Nigerian Islamic extremists Boko Haram and an armed conflict in the English-speaking areas, with clashes between Yaoundé's army and separatists, the COVID-19 emergency has aggravated the food emergency situation. *emergenza alimentare*. Conflicts, violence and displacement of the population continue, with a current estimate of 950,000 internally displaced persons.

In Zimbabwe, the pandemic is having an impact on already critical food security the situation resulting from the ongoing macroeconomic crisis and consecutive years of drought, and is likely to result in a further increase in the number of people with food insecurity. Urban food insecurity is expected to increase dramatically with COVID-19 impacts and, in turn, lead to an increase in malnutrition. COVID-19 mitigation measures are causing logistical disruptions, higher import prices per land and widespread loss of income.

In Mozambique is considered extremely vulnerable and the impact of COVID-19 has aggravated food insecurity in the country. Hisdependence on food imports which are now exposed to price fluctuations has decreased the availability and access to food of the most vulnerable social groups.

In **Yemen**, which depends on food imports, 15.9 million people (53% of the population) suffer acute food insecurity as early as 2018. And the latest report in May 2020 signals the worsening situation.

The us embargo in **Syria** has starved 9.3 million people, with another 2 million due to the macroeconomic crisis.

In **Libya**, between war and falling oil prices, hunger affects at least 10% of the population and a third of the 650,000 migrants.

Algeria, Jordan, Tunisia, and Egypt will be particularly affected by the global recession. Critical situation also in **Palestine**...

Iran, another victim of the US embargo, estimates covid-19 infections at 25 million...

Asia is home to more than half of the world's under nourished people - an estimated 381 million people in 2019. However, the malnutrition rate in the region's population is 8.3%, below the global average (8.9 percent), and less than half that of Africa.

Bangladesh is facing a crisis that has doubled its poverty rate in just a few months. Contagion containment measures put rice production and market access at risk of discontinuity. And remittances from abroad, the second largest source of family income, fell (-20%).

In **Afghanistan**, the situation is critical in urban areas due to the recession. And the mouths to feed have increased, because of the re-entry of those who worked in Pakistan and Iran but lost their jobs.

In the **Democratic People's Republic of Korea**, the risk of food security was attributed in 2019 to 10.1 million human beings. Between March and April 2020 there was then the collapse of trade with China (-90%).

Asia has shown progress in reducing the number of hungry people in recent years, down 8 million from 2015.

In **Afghanistan**, COVID-19 mitigation measures have led to cascading effects range. This includes food price increases to 20%, reduced incomes and food supply chains associated with export restrictions and problems accessing agricultural input, fuel and labour. Such developments are likely to offset an expected seasonal improvement in food insecurity in rural areas after summer cereal harvesting (August) and the start of the winter sowing season in September. Nomads are also vulnerable due to restrictions on movement and borders have potentially disrupted their traditional migration to key grazing areas compromising the health of their animals.

In **Latin America and the Caribbean**, there has been an increase in hunger in recent years... An additional 10 million people are estimated to fall into poverty and go hungry in 11 countries in the region, including small islands in the Caribbean.

In 2019, 3.4 million people suffered from severe food insecurity, which means they are in an emergency-like situation where basic food needs cannot be met in both quantities and varieties of food.

The analysis of economic indicators for 2020 is not encouraging. The Economic Commission for Latin America and the Caribbean expects an average regional contraction of -5.3% this year due to the pandemic.

The impact of this contraction in economic activity can exacerbate the already precarious condition of millions of vulnerable people who need to work to get access to food. This is currently made difficult if it is not impossible to protect the use of restrictions on movements and quarantine. The International Labour Organization's (ILO) estimates that poor and working classes are losing jobs and lack of income due to reduced remittances from abroad are also negative.

WFP's projections of severe food insecurity cover countries where the UN agency provides technical assistance to governments and has ongoing operations. This is the case of Bolivia, Colombia, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Peru, the Dominican Republic and small developing island states in the Caribbean. The situation in Venezuela and Brazil is also very critical.

- The total number of people with severe food insecurity could increase from 3.4 million in 2019 to around 13.7 million in 2020, largely due to COVID-19.
- In Haiti, the number of people affected by severe food insecurity could be between 700,000 and 1.6 million.
- The population of Venezuelan migrants in **Colombia, Ecuador and** food insecurity could increase from 540,000 to over 1 million.
- In the Central American Dry Corridor, the number of people with severe food insecurity could potentially reach nearly 3 million, from the current more than 1.6 million.
- The Hurricane Season in the Caribbean begins in June, a further risk for which governments must prepare.

2. Call for action

In response to the ongoing emergency, FAO is working to involve governments and a wide range of stakeholders in an action plan, collecting and analysing data to better understand emerging trends and accurately identifying potential outbreaks, as well as providing timely technical advice and capacity development services across a wide range of sectors. In addition, the Organisation offers investment support to catalyse various forms of partnership and financing.

A new program, also supported by the "Coalition for Food", is launched by the Italian government and led by FAO with the aim of recruiting political, financial, and technical assistance to the countries affected by the COVID-19 emergency.

In order to minimize the damage of the COVID-19 pandemic on food security and nutrition while stimulating a transformation of the world's food systems to make them more resilient, equitable and sustainable, FAO calls for immediate action to be taken in seven key priority areas:

1. strengthen a Global Humanitarian Response Plan to the COVID-19 Emergency;
2. improve the data on which decision-making is set up;
3. ensuring economic inclusion and social protection to reduce poverty;
4. consolidate trade standards and food safety standards;
5. increase the resilience of small producers to help recover;
6. prevent future zoonotic pandemics by enhancing the "one health" approach;
7. triggering the transformation of food systems.

The idea that emerges from these reports is that, considering the situation from the perspective of sustainability, a global conversion to healthy eating would help, on the one hand, to control the spread of hunger and, on the other hand, to achieve enormous savings.

It has been calculated that this transformation would make it possible to offset almost entire health costs from poor nutrition, which are expected to reach 1% in 2030. 300 billion U.S. dollars per year, while the social cost related to the diet of greenhouse gas emissions, estimated at 1.700 billion U.S. dollars, could be reduced by up to three-quarters.

It calls for a renewal of food systems to reduce the cost of nutritious food and facilitate access to healthy eating.

While it is true that specific solutions will differ from country to country, and even from region to region, the general responses must be sought in interventions across the entire food supply chain, in the food environment and in the political economy, on which trade, public spending and investment policies are based.

The study urges governments to integrate nutrition into their approaches to agriculture; to take action to reduce the factors that affect rising costs in the production, storage, transport, distribution and marketing of food, including by reducing inefficiencies as well as food losses and waste; to incentivise small producers to produce and sell more nutritious foods and to ensure access to markets; to prioritise the nutrition of children, as a group of the population most in need; to promote a change in eating habits through information and communication; to introduce the problem of nutrition into national social security systems and investment strategies.

FAO and WHO have published a guideline aimed at food supply chain operators whose full text can be found on the following website:

<https://www.who.int/publications/i/item/covid-19-and-food-safety-guidance-for-food-businesses>

The objective of the guidelines is to take stock of the 'additional measures' that operators must apply to ensure the integrity of the food supply chain and the safety of products.

Transmission risks and measures to be taken

The transmission of the new coronavirus takes place mainly through direct interpersonal contact, through the respiratory secretions that can spread within a couple of meters of the infected person.

- Safe distances between people.
- Use of disposable masks, shirts, and gloves (or subject to disinfection before reuse).
- Frequent hand washing.
- Respiratory hygiene. 'Cover mouth/nose when coughing/sneezing, immediate and suitable disposal of tissues used to dry mouth/nose/eyes'.

Persistence on SARS-CoV2 surfaces has also been demonstrated with laboratory tests. The virus can maintain vitality for up to 24 hours on the cardboard, 72 hours – 3 days on plastic and stainless steel.

- Sanitation of surfaces, work tools and objects (including smartphones and other devices).
- Frequent cleaning/disinfection of contact points (e.g. handles, keys, buttons, knife handles, etc.).
- Physical removal of all equipment and tools that are not essential for production.

Sars-CoV-2 can also be transmitted by food-fecal, as has already been established. And it could also be transmitted via aerosols, via respiratory secretions at even greater distances.

- Frequent sanitation of bathrooms, dedicated bathrooms for the public and visitors.
- Ventilation of the premises, frequent sanitization of those without air lights (e.g. elevators).
- Regular disinfection of air conditioning filters.

Food Hygiene And MOCA-Specific Measures

Organisations operating in the food supply chain must also apply enhanced hygiene measures to prevent the risk of food contamination and MOCA (Food Contact Materials and Objects).

- Do not touch your mouth, nose, and eyes before you have washed your hands, nor when handling food.
- Frequent washing/sanitization of utensils and objects in contact with food (e.g. ladles, pincers and supports for toppings or other bulk foods also present in the gastronomy, charcuterie, baked goods, etc.).

How to prevent the spread of COVID-19 within the food company?

Clear and effective training and information on the above measures.

All workers working in the food company (direct and indirect food manipulators but also cleaners, maintenance workers, delivery workers, inspectors, employees and anyone else who may even occasionally come into contact with food matrices or surfaces in contact with food, or have access to areas where food is handled) must be informed about :

- ✓ hygiene measures to be respected with absolute rigour,
- ✓ symptoms (respiratory and gastrointestinal) that involve a duty of communication and a prohibition on access to work environments.

Symptoms and risk of infection

Even asymptomatic and-pre-symptomatic coVID-19-symptomatic subjects can infect other people and surrounding environments. It is therefore essential to use proper testing immediately in case of suspicion. Not only can those who are infected not be able to work but anyone who is not well, with symptoms related to those of Covid-19, must immediately leave the workplace to alert the competent doctor.

All operators in the supply chain must establish appropriate procedures for managing cases of symptoms and illness of staff.

Social distance in workplaces

Social distance must also be encouraged in the working environments with the most appropriate measures. Based on an analysis of the risks of non-compliance with interpersonal safety distances, considering the places, times and working conditions.

- Distance and stagger the workstations so that you never have one worker in front of another.

- Indicate the paths that staff should follow inside the premises, even with visual signals on the floor, to avoid intersections/assemblies and facilitate cleaning and sanitization operations.
- Limit the number of people who can be present in a workspace at the same time (by organizing individual activities into small groups, where possible, to reduce interhuman interaction).

Places of refreshment and rest must be subjected to similar attention. Internal canteens must provide only essential services and allow the physical distance of at least 1 meter (better 2) between individuals to be maintained, even through shifts. With visual calls, if any verbal, to the correct hygiene of the hands and respect for distances.

Distribution, public establishments, premises, and open spaces to the public and/or external parties

All organizations where there is physical interaction with the public and/or external parties (suppliers and customers, professionals, and other visitors, including maintenance and cleaning workers and transporters) must integrate the self-control measures as follows.

A) Basic precautions:

- Signs of obligation to maintain interpersonal safety distances (not less than 1 meter, in Italy).
- Contingent accesses and presences inside the premises, to prevent any possible assembly.
- Encourage the use of hand masks, gloves, and disinfectants.

B) Additional measures, to be considered on a case-by-case basis:

- Measure the body temperature of incoming people.
- Apply signs, on floors and in the most frequented places, to encourage respect for interpersonal safety distances.
- Define mandatory routes and where appropriate to separate the premises, even by removable obstacles, to delimit the areas (and surfaces) exposed to contamination risks.
- Install barriers (e.g. plexiglass in front of crates and counters, controlled gates), to protect staff.
- Encourage (even through discounts, even symbolic) cashless payments.
- Encourage the sanitization of trolley handles, baskets, display equipment (fridges, freezers, shelves) and other surfaces for multiple physical contact (e.g. turnstiles, attendance badge boxes, elevator buttons, crates, and counters) with a fixed frequency.
- Warn consumers about the appropriate hygiene in the handling of food after purchase (washing the hands and food itself, where appropriate).

Logistics

Logistics is an extremely critical phase – in both areas of transport between operators and home delivery of food – in the face of the risks of transmission of COVID-19 by direct contact or via

surfaces. These risks, never (or very rarely) considered so far in the agri-food sector, must therefore be analysed and mitigated by the introduction of appropriate measures.

- Protect food (by individual packaging or external packaging, as appropriate, as far as possible).
- Do not let drivers get off their vehicles, if not indispensable. Do not leave vehicles unattended during delivery. Avoid direct contact with the consumer where possible in the case of food delivery (delivery in front of the door, remote payment during order).
- Notify the haulers, also on their part, of the hygiene measures mentioned in the premise. Safety distances, hand washing and use of masks in the first place, before food delivery.
- Containers and packaging (including riders' rigid bags) must be regularly sanitised in case of reuse

Attached Tables

TABLE 1
PREVALENCE OF UNDERNOURISHMENT (PoU) IN THE WORLD, 2005–2019

	Prevalence of undernourishment (%)							
	2005	2010	2015	2016	2017	2018	2019*	2030**
WORLD	12.6	9.6	8.9	8.8	8.7	8.9	8.9	9.8
AFRICA	21.0	18.9	18.3	18.5	18.6	18.6	19.1	25.7
Northern Africa	9.8	8.8	6.2	6.3	6.6	6.3	6.5	7.4
Sub-Saharan Africa	23.9	21.3	21.2	21.4	21.4	21.4	22.0	29.4
Eastern Africa	32.2	28.9	26.9	27.1	26.8	26.7	27.2	33.6
Middle Africa	35.5	30.4	28.2	28.8	28.7	29.0	29.8	38.0
Southern Africa	4.9	5.4	7.0	8.0	7.0	7.9	8.4	14.6
Western Africa	13.8	12.1	14.3	14.2	14.6	14.3	15.2	23.0
ASIA	14.4	10.1	8.8	8.5	8.2	8.4	8.3	6.6
Central Asia	11.0	7.7	3.0	3.0	3.0	3.0	2.7	< 2.5
Eastern Asia	7.6	3.8	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
South-eastern Asia	17.3	11.7	10.5	10.0	9.8	9.8	9.8	8.7
Southern Asia	20.6	15.4	14.4	13.8	13.1	13.8	13.4	9.5
Western Asia	11.8	10.4	10.7	11.1	11.1	11.2	11.2	13.1
<i>Western Asia and Northern Africa</i>	10.9	9.7	8.6	8.9	9.0	8.9	9.0	10.4
LATIN AMERICA AND THE CARIBBEAN	8.7	6.7	6.2	6.7	6.8	7.3	7.4	9.5
Caribbean	21.3	17.5	17.3	17.0	16.6	17.0	16.6	14.4
Latin America	7.8	5.9	5.4	6.0	6.1	6.6	6.7	9.1
Central America	8.1	7.9	7.9	8.6	8.3	8.4	9.3	12.4
South America	7.6	5.1	4.4	4.9	5.2	5.8	5.6	7.7
OCEANIA	5.6	5.4	5.5	5.9	6.0	5.7	5.8	7.0
NORTHERN AMERICA AND EUROPE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

On track Off track – some progress Off track – no progress or worsening

NOTES: * Projected values. ** The projections up to 2030 do not reflect the potential impact of the COVID-19 pandemic. For country compositions of each regional/subregional aggregate, see Notes on geographic regions in statistical tables inside the back cover. See Box 2, Annexes 1B and 2 for a description of how the projections are made.

SOURCE: FAO.

TABLE 2
NUMBER OF UNDERNOURISHED PEOPLE IN THE WORLD, 2005–2019

	Number of undernourished (millions)							
	2005	2010	2015	2016	2017	2018	2019*	2030**
WORLD	825.6	668.2	653.3	657.6	653.2	678.1	687.8	841.4
AFRICA	192.6	196.1	216.9	224.9	231.7	236.8	250.3	433.2
Northern Africa	18.3	17.8	13.8	14.4	15.5	15.0	15.6	21.4
Sub-Saharan Africa	174.3	178.3	203.0	210.5	216.3	221.8	234.7	411.8
Eastern Africa	95.0	98.1	104.9	108.4	110.4	112.9	117.9	191.6
Middle Africa	39.7	40.0	43.5	45.8	47.2	49.1	51.9	90.5
Southern Africa	2.7	3.2	4.4	5.1	4.5	5.2	5.6	11.0
Western Africa	36.9	37.0	50.3	51.2	54.2	54.7	59.4	118.8
ASIA	574.7	423.8	388.8	381.7	369.7	385.3	381.1	329.2
Central Asia	6.5	4.8	2.1	2.1	2.2	2.1	2.0	n.r.
Eastern Asia	118.6	60.6	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
South-eastern Asia	97.4	70.1	66.7	63.9	63.4	64.2	64.7	63.0
Southern Asia	328.0	264.0	263.1	256.2	245.7	261.0	257.3	203.6
Western Asia	24.3	24.2	27.6	29.2	29.5	30.4	30.8	42.1
<i>Western Asia and Northern Africa</i>	42.6	42.0	41.4	43.6	45.0	45.4	46.4	63.5
LATIN AMERICA AND THE CARIBBEAN	48.6	39.6	38.8	42.4	43.5	46.6	47.7	66.9
Caribbean	8.4	7.2	7.4	7.3	7.1	7.3	7.2	6.6
Latin America	40.1	32.4	31.4	35.1	36.3	39.3	40.5	60.3
Central America	11.8	12.4	13.4	14.7	14.4	14.7	16.6	24.5
South America	28.4	20.0	18.0	20.4	21.9	24.6	24.0	35.7
OCEANIA	1.9	2.0	2.2	2.4	2.4	2.4	2.4	3.4
NORTHERN AMERICA AND EUROPE	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.

On track Off track – some progress Off track – no progress or worsening

NOTES: * Projected values. ** The projections up to 2030 do not reflect the potential impact of the COVID-19 pandemic. n.r. = not reported, as the prevalence is less than 2.5 percent. Regional totals may differ from the sum of subregions, due to rounding. For country compositions of each regional/subregional aggregate, see Notes on geographic regions in statistical tables inside the back cover. See Box 2, Annexes 1B and 2 for a description of how the projections are made.

SOURCE: FAO.